

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR03/00542**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 H04B 1/38**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04B 1/38, H04R1/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Korean Patents and applications for inventions since 1975  
Korean Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP P10-51876 A( MATSUSHITA ELECTRIC Corp) 20 February 1998(02.02.1998) See the whole Document	1, 3 - 6
Y	KR00-52066 A( GilHwan, Lee) 16. August. 2000(16.08.2000) See page 3 line 8-11, Figure 1	1, 3 - 6

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

23 JUNE 2003 (23.06.2003)

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